

CLAIMS*What is claimed is*

1. A composition for the production of foam plastics from disposable pressurized containers, characterized in that, one day after application at the latest, the residue left in the pressurized container has a diisocyanate monomer content of less than 5.0% by weight, based on the residual contents of the emptied container.
2. A composition as claimed in claim 1, characterized in that it has a diisocyanate monomer content of less than 2.0% by weight and, more particularly, 1.0 or 0.5% by weight, based on the total contents of the container, preferably before its application.
3. A composition as claimed in claim 1 or 2, characterized in that the composition contains the following components before its application:
- A) as reactive component, at least one isocyanate prepolymer with a diisocyanate monomer content of less than 3.0% by weight, based on the prepolymer, an NCO functionality of 2 to 5, an NCO content of 8 to 30% by weight, based on the prepolymer, and a viscosity of 5 to 200 Pa·s at 25°C, as measured in accordance with DIN 53015, the prepolymer having been produced from aliphatic diisocyanates containing 2 to 36 carbon atoms, cycloaliphatic diisocyanates containing 5 to 30 carbon atoms and/or aromatic diisocyanates containing 8 to 20 carbon atoms, each with a boiling point of at most 180°C at 10 mbar,
 - B) at least one catalyst for the reaction of the isocyanate group with HO groups,
 - C) at least one blowing agent,
 - D) at least one foam stabilizer and
 - E) optionally additives, such as solvents, flameproofing agents and plasticizers.
4. A composition as claimed in claim 3, characterized in that the reactive component is a cyclotrimer of a diisocyanate (isocyanurate), more particularly a mixture of HDI and IPDI and mixed trimers thereof.

5. A composition as claimed in claim 3, characterized in that the reactive component is a prepolymer of diisocyanates and/or isocyanurates containing NCO groups and polyols.

6. A composition as claimed in at least one of claims 1 to 5, characterized in that the prepolymer has been produced from diisocyanates with NCO groups differing in their reactivity.

7. A composition as claimed in at least one of claims 1 to 6, characterized by the following quantities of its constituents:

- 50 to 90 % by weight of the prepolymer,
- 0.1 to 5.0 % by weight of the catalyst,
- 5 to 35 % by weight of the blowing agent,
- 0.1 to 5.0 % by weight of the foam stabilizer and
- 0 to 51.5% by weight of additives.

8. A one-component foam plastic obtainable from the composition claimed in at least one of claims 1 to 7 and moisture.

9. A two-component foam plastic obtainable from the composition claimed in at least one of claims 1 to 7 as the first component and a polyol as the second component.

10. A foam plastic as claimed in claim 8 or 9, characterized by its use as an insulating or assembly foam, more particularly in situ.

11. A composition as claimed in claim 1, 2, 8, 9 or 10, characterized in that the composition contains the following components before its application:

A) as reactive component, at least one polymer-MDI or polymer-MDI prepolymer with a diisocyanate monomer content of less than 20% by weight, based on the polymer-MDI, an average NCO functionality of > 2.7 , an NCO content of 26.0 to 30.0% by weight, based on the polymer-MDI, and a viscosity of 5 to 2,000 Pa·s at 25°C according to DIN 53015, the polymer-MDI being obtainable from technical MDI (crude MDI) with an average functionality of > 2.3 by removal of the diisocyanodiphenylmethane,

- B) at least one catalyst for the reaction of the isocyanate group with HO groups,
- C) at least one blowing agent,
- D) at least one foam stabilizer and
- 5 E) optionally additives, such as solvents, flameproofing agents and plasticizers.
12. A composition as claimed in at least one of claims 1, 2, 9, 10 or 11, characterized in that the reactive component is a prepolymer of the polymer MDI and polyols, more particularly diols containing 2 to 6 carbon atoms.
- 10 13. A composition as claimed in at least one of claims 1, 2, 9, 10, 11 or 12, characterized in that up to 50% by weight of the polymer MDI is replaced by low-monomer NCO prepolymers of HDI, TDI, IPDI, 2,4-MDI, 4,4'-MDI or by cyclotrimers of aliphatic diisocyanates containing 4 to 14 carbon atoms, more especially for producing moisture-curing foams differing in their hardness and
- 15 elasticity.
14. A composition as claimed in at least one of claims 1, 2 or 9 to 13, characterized by the following quantities of its components:
- 50 to 90 % by weight of the polymer-MDI or its prepolymer,
 - 0.1 to 5.0 % by weight of the catalyst,
 - 20 - 5 to 35 % by weight of the blowing agent,
 - 0.1 to 5.0 % by weight of the foam stabilizer and
 - 0 to 51.5% by weight of additives.

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